

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Viviendas! LLC

#### New Mexico Manufacturing Extension Partnership

#### Lean Implementation Quadruples Productivity

##### Client Profile:

Viviendas, a privately owned manufacturing company located in Taos, New Mexico, builds pre-fabricated homes by manufacturing and assembling a series of individual panels at their manufacturing plant, then transports the panels to the home site for assembly. Viviendas currently employs 7 people.

##### Situation:

Viviendas was spending an excessive amount of time and effort assembling and transporting panels, which resulted in substantially higher labor costs. Customers were able to design a home by choosing from multiple styles which led to a very customized and labor intensive finished product. In addition, their roof assembly process required renting an expensive crane for three full days. Viviendas was in need of a solution for these problems and contacted the New Mexico manufacturing Extension Partnership (New Mexico MEP), a NIST MEP network affiliate, for help.

##### Solution:

New Mexico MEP began work with Viviendas by conducting a Value Stream Map (VSM) and Product Rationalization of their panel assembly process. During the project, New Mexico MEP was able to help Viviendas improve their plant layout and create standardized panel sizes. Also during the project, Viviendas adopted a last in, last out (LIFO) panel loading and panel construction method. Finally, the implementation of a 5S led to the creation of supermarkets for sheet goods, raw materials and framing areas.

##### Results:

- \* Reduced time in panel manufacturing by 75 percent.
- \* Reduced roof assembly time by 90 percent.
- \* Reduced total manufacturing prep time by 90 percent.
- \* Hired 3 new employees.
- \* Increased number of houses built from 4-6 houses per year to 26 houses per year.
- \* Increased sales.
- \* Saved \$17,000 per house in labor and equipment costs.

##### Testimonial:

"New Mexico MEP helped us see there were a lot of different ways to get a highly efficient manufacturing process. They helped us see our business in a completely different manner. Their method of questioning what we were doing made us take an analytical look at how we were assembling the panels and how we were building homes. As a result of simplifying the product and the process, we have significantly increased our ability to respond to the needs of our customers."

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Dave DiCicco, Owner